CLAIMS

1. A method for the synchronous control of a plurality of handling devices, such as industrial robots, wherein a control command to be performed by controls of handling devices participating in a synchronization is initiated on a random control (initiating control) and is then further processed therein as a function of the nature of the command.

2. The method according to claim 1, wherein the command processing involves the control command for synchronous implementation to be distributed to the other controls, blocked or only locally implemented.

3. The method according to claim 1, wherein the initiating control checks current, control-relevant states of all the controls.

4. The method according to claim 3, wherein the command processing takes place after state checking.

5. The method according to claim 3, wherein command processing does not take place in the case of negative state checking.

6. The method according to claim 3, wherein a state communication takes place following an interrogation by the initiating control.

7. An apparatus for the synchronous control of a handling device, such as an industrial robot, in a union of such handling devices having:

- storage means for storing a control program for the handling device ;

- input means for initiating a control command to be distributed for synchronization purposes;

- transmitting means for transmitting an initiated control command to other controls participating in a synchronization;

- receiving means for receiving a command transmitted by another participating control ;

- processing means for processing the control program in accordance with the control command and optionally for checking the initiated or received command; and

- decision means for blocking or unblocking the transmission and/or for ordering a solely local implementation of an initiated control command.

8. The apparatus according to claim 7, wherein the controls are linked by means of a communication network.

9. The apparatus according to claim 7, wherein it is located on a common hierarchic plane with the other participating controls .

10. The apparatus according to claim 7, wherein it is connected together with the other participating controls to a common operating device , which for operating purposes can be switched to the different controls .

11. The apparatus according to claim 7, wherein the participating controls are listed in a variable stored in the storage means.